UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,426	07/13/2004	Javier Francisco Aprea	NL 020026	7432

24737   7590   03/16/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER
SAINT CYR, LEONARD

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
03/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/501,426	APREA ET AL.
	Examiner	Art Unit	
	LEONARD SAINT CYR	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12/03/08_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-21_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 - 21_ is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _31 July 2004_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Reopen prosecution After Appeal

1.   In view of the supplemental appeal brief filed on 12/03/08, PROSECUTION IS

HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below.

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626

Response to Arguments

2.   Applicant's arguments with respect to claims 19 - 21 have been considered but

are moot in view of the new ground(s) of rejection.

Applicant argues that Fielder et al., do not teach determining whether any block within a received frame is a redundant block or a non-redundant block, mapping the non-redundant blocks onto sub-band samples (Appeal brief, pages 11, and 12).

3.   Applicant's arguments filed 12/03/08 have been fully considered but they are not persuasive.

Applicant argues that Fielder et al., do not teach that the length of each audio frame is determined from a defined sequence of frame lengths or overlap lengths (Appeal brief, pages 9 - 11).

The examiner disagrees, since Fielder et al., disclose "encoded information frame includes control information conveying lengths of segments of audio information in a sequence of overlapping segments...and the sequence having a length equal to the frame interval plus a frame overlap interval" (col.5, line 65 – col.6, line 8). Having the sequence length equals to the frame interval plus a frame overlap interval implies determining the frame length from a defined sequence of frame lengths or overlap lengths, since the lengths of segments of audio information consists of a sequence of overlapping segments.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 – 21 define non-statutory processes because they merely manipulate an abstract idea (mathematical algorithm). The claimed process, a series of steps to be performed on a computer, simply manipulates an abstract idea; does not have any post or pre computer process activity.

In the instant application, the disclosure is directed to any and every structure for carrying out the claimed functions, and not solely to specific structure.

Claims 1 – 21 reviewed in light of the specification, simply recite an abstract idea for encoding audio using a stream that carries audio and video data.

As can be seen by claims 1 – 20, these claims recite an abstract idea by setting forth the step of "providing a mean effective audio frame length F that equals a video frame length 1/Fv over an integral number M video frames, varying lengths F of the audio frames in a defined sequence of frame lengths ". These steps are abstract ideas.

Reviewing each claim as whole fails to show the transformation or reduction of subject matter to a different state of thing. Providing a mean effective audio frame length F that equals a video frame length 1/Fv over an integral number M video frames, is merely an abstract idea to encode audio data, not a different state or thing.

It is readily apparent that when claims 1 – 21 are each taken as a whole, the claims are directed to the preemption of an abstract idea, and thus are non-statutory.

Claims **1 - 16** are rejected under 35 USC 101 as not falling within one of

the four statutory categories of invention. While the claims recite a series of

steps to be performed, a statutory process under 35 USC 101 must be tied to

another statutory category (such as a manufacture or a machine) or transform

underlying subject matter (such as an article or material) to a different state or

thing. The steps in those claims can be performed manually without the use of a

particular machine. Those claims could be done in a piece of paper, wherein a

the audio input data is given to a user, and using digital signal processing (DSP)

theory to derive the effective audio frame length by varying lengths F of the audio

frame as claimed by the applicant. Thus, claims **1 - 16** do not define a statutory

process.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6.   Claims 17 – 21 are rejected under 35 U.S.C. 112, first paragraph, as containing

subject matter which was not described in the specification in such a way as to enable

one skilled in the art to which it pertains, or with which it is most nearly connected, to

make and/or use the invention.

The specification is enabling for a portion of the subject matter claimed but the

enablement is not commensurate in scope with the claims. Specifically, the

specification fails to show how the "encoder", which appears in no combination with another element or means, can perform the claimed functions. The "mean effective audio frame length equals the video frame length 1/fv" is just nun-functional descriptive material. Thus, it would require undue experimentation for a person having ordinary skill in the pertinent art to make and use the invention as disclosed and claimed.

Single means claims 17 - 21 are subjected to an undue breadth rejection. See In re Hyatt 218 USPQ 195 (CAFC 1983).

Drawings

7.   The drawings are objected to **because the unlabeled boxes shown in Figs 1 – 3 should be provided with descriptive text labels.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

8.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

9.   Claims 1 – 4, and 13 – 15, and 17 are rejected under 35 U.S.C. 102(a) as being

anticipated by Fielder et al., (US Patent 6,226,608).

As per claims 1, and 17, Fielder et al., teach a method of audio encoding a

stream that carries audio and video data, including: encoding the audio data to provide

a mean effective audio frame length {overscore (F)} that equals a video frame length

1/f.sub.V over an integral number M video frames, wherein the encoding includes

varying lengths F of the audio frames in a defined sequence of frame lengths

("sequence of overlapping segments…and the sequence having a length equal to the

frame interval plus a frame overlap interval" col.5, line 65 – col.6, line 8).

As per claim 2, Fielder et al., further disclose the frame length F is adjusted by

varying an overlap O between successive audio frames ("overlapping segments having

lengths that vary…"; Abstract, line 9; col.15, lines 1 – 5).

As per claim 3, Fielder et al., further disclose that the value F(j) repeats periodically on j, the periodicity of F(j) defining a sequence of frames ("sequence of overlapping segments"; col.6, lines 1 – 5).

As per claim 4, Fielder et al., further disclose that the method having M video and N audio frames per sequence, each audio frame being composed of k blocks of t samples each (col.12, lines 48 – 51).

As per claims 13, and 14, Fielder et al., teach a method of audio encoding a stream that encodes audio and video data including encoding audio samples of N quasi video-matched audio frames in frames with a defined sequence of overlap lengths, wherein an effective length of the audio frames coincides with a length of a sequence of M video frames, where M and N are positive integers ("overlapping segments having lengths that vary…"; col.5, lines 20 – 24, and 30 – 35; col.5, line 65 – col.6, line 8).

As per claim 15, Fielder et al., further disclose audio frames, each of which is tagged to indicate a size of the audio frame (N parameter pertains …segment length"; col.17, lines 4 – 6; col.11, lines 26, and 27).

As per claim 16, Fielder et al., further disclose that each block of each audio frame is tagged to indicate whether or not the block is a redundant block ("cyclical redundancy check"; col.29, line 6).

Claim Rejections - 35 USC § 103

10.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fielder

et al., (US Patent 6,226,608).

        As per claim 18, Fielder et al., do not specifically teach that the variable overlaps

includes a total of P short overlaps of length O and a total of Q long overlaps of length

O+ in an overlap sequence. However, since Fielder et al., disclose generate a

sequence of overlapping segments of audio information (col.5, lines 58, and 59). One

having ordinary skill in the art at the time the invention was made would have found it

obvious to have short and long overlaps segments, because that would help process

one or more channels of audio information by a block-encoding process to generate

encoded information stream (col.7, lines 55 - 57).

11.   Claims 16, and 19 - 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Fielder et al., (US Patent 6,226,608) in view of Murakami et al., (US

Patent 5,930,251).

        As per claim 16, Fielder et al., do not specifically teach that each block of each

audio frame is tagged to indicate whether or not the block is a redundant block.

         Murakami et al., teach that the audio coding cuts redundant component of the

audio signal by using one of a plurality of information-source coding method and

produces an audio coded bits stream (col.7, lines 52 - 62).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to delete redundant components as taught by Murakami et

al., in Fielder et al., because that would improve the audio coding system (col.7, lines 60

- 67).

As per claim 19, Fielder et al., teach an audio decoder for decoding a stream that

encodes audio and video data, which decoder calculates an expected effective frame

length of an incoming frame based on a defined sequence of frame lengths, adjusts the

actual length of the incoming frame to make it equal to the expected frame length,

("sequence of overlapping segments...and the sequence having a length equal to the

frame interval plus a frame overlap interval" col.5, lines 20 – 24; Abstract, lines 9 - 11;

col.15, lines 1 – 5; col.29, line 6; col.5, line 65 – col.6, line 8).

However, Fielder et al., do not specifically teach determining whether any block

within a received frame is a redundant block or a non-redundant block, mapping the

non-redundant blocks onto sub-band samples.

Murakami et al., teach that the audio coding cuts redundant component of the

audio signal by using one of a plurality of information-source coding method and

produces an audio coded bits stream (col.7, lines 52 - 62).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to delete redundant components as taught by Murakami et

al., in Fielder et al., because that would improve the audio coding system (col.7, lines 60

- 67).

As per claim 20, Fielder et al., further disclose modifying the overlap status of

blocks in the data stream by application of one or more of a set of block operators to

each block ("editing operations like splicing"; col.5, lines 27 – 29).

As per claim 21, Fielder et al., further disclose that the set of operators includes

a SHIFT, an operator that is a combination of both DROP and APPEND operators

("shifting to a shorter segment length"; col.5, line 8).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to LEONARD SAINT CYR whose telephone number is

(571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

number for the organization where this application or proceeding is assigned is (571)-

273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571)-272-1000.

LS
03/07/09

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626